

REMARKS

The present invention is directed to a dry-process non-woven pulp fabric which is strong even when it is used in a wet state, which is suitable for use as a wiper.

This Amendment is filed in response to the final Office Action dated July 11, 2008.

In the present Amendment, claim 1 is amended to recite that the dry-process nonwoven pulp fabric is used for wiping and is made by an air-laid method. Claim 1 was amended to further recite that the heat-bondable synthetic fiber in the internal and surface layers is a heat-bondable synthetic conjugate sheath-core type fiber. Furthermore, claim 1 is amended to recite that the combination of polymer comprising polyethylene / polypropylene and/or polyethylene / polyester is a combination of polymer comprising polyethylene as sheath portion / polypropylene as core portion and/or polyethylene as sheath portion / polyester as a core portion.

Support for the amendment reciting that the fabric is made by an air-laid method can be found in the specification, e.g., page 10, lines 15-16. Support for the amendment that the fabric is used for wiping can be found in the specification, e.g., on page 1, lines 8-14. Support for the amendment incorporating a conjugated sheath-core type (fiber) can be found in the specification, e.g., on page 5 at lines 16-26. Specifically, the specification discloses that the polyolefinic heat-bondable synthetic fibers are suitable sheath-core type or eccentric side-by-side type conjugate fibers. Furthermore, the polyolefins constituting the sheath or a peripheral portion of the fiber include polyethylene and polypropylene. The polymers constituting the core or an internal portion of the fiber are preferably polymers having a melting point higher than that of the sheath and unchangeable at a heat bonding treatment temperature. (Id.).

Thus, no new matter has been added. Entry of the Amendment is respectfully submitted to be proper. Upon entry of the Amendment, claim 1 will be the only claim pending in the application.

Claim 1 was rejected under 35 U.S.C. § 103(a) as being unpatentable over WO 00/38565 (Amundson) in view of U.S. Patent 6,278,037 (Schmidt).

Applicant traverses and requests reconsideration and withdrawal of the rejection, particularly in view of the amendments to the claims and the following remarks.

First, claim 1 has been amended to recite:

1. A dry-process nonwoven pulp fabric for wiping composed of
united layer structures,

made by air-laid method,

and which comprises an internal layer portion in which heat-bondable synthetic conjugate sheath-core type fibers formed of a combination of polymers comprising polyethylene as sheath portion/polypropylene as core portion and/or polyethylene/polyester, and pulp fibers are mixed at a ratio of 20/80 to 60/40% by weight and the synthetic fibers and/or the synthetic fibers and pulp fibers are heat bonded to one another and which has a basis weight of 8 to 240 g/m²,

and surface layer portions between which the internal layer portion is sandwiched, which contain heat-bondable synthetic conjugate sheath-core type fibers formed of a combination of polymers comprising polyethylene as sheath portion/polyester as core portion and the synthetic conjugate fibers are heat

bonded to one another and which has a basis weight (METSUKE) of the range from more than 5 g/m^2 to 12 g/m^2 ,

wherein the internal layer portion and the surface layer portion are united as a whole by heat bonding of the synthetic conjugate fibers to one another, the ratio of a strength in a lengthwise direction to that in a crosswise direction is from 0.8 to 1.2 in both dry and wet states, the ratio of a strength in a dry state to that in a wet state is from 0.6 to 1.1, the water absorption is from 8 to 20 g/g, and the total basis weight is from 20 to 250 g/m^2 ,

and

wherein the heat-bondable synthetic (conjugate) fiber has the length from 1 to 15 mm and the fineness from 0.5 dt to 50 dt.

Specifically, claim 1, as amended, recites that the polymer of sheath portion of the conjugate fibers in both the internal and surface layers. Further, the non-woven fabric is produced by air-laid method and that the fabric used for wiping. Thus, Applicant submits that claim 1 is patentable over Admunson and Schmidt, since those references, alone or in combination do not teach, suggest, motivate or provide any apparent reason to modify or combine the documents to arrive at the subject matter of the present invention.

Furthermore, Applicant respectfully submits that the invention in Schmidt is not in the same field of endeavor as the present application. The presently claimed invention is for wiping. Schmidt only teaches an absorbent article, not wiping fabrics.

Additionally, the presently claimed fiber is obtained by an air-laid method. Applicant respectfully submits that excellent non-woven fabric in ratio of the lengthwise and crosswise direction strength is obtained when it is made by an air-laid method, as recited in the present claim.

For the aforementioned reasons, Applicant respectfully submits that the present fiber is patentable over Amundson and Schmidt, and accordingly requests that the rejection be withdrawn.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the local Washington, D.C. telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

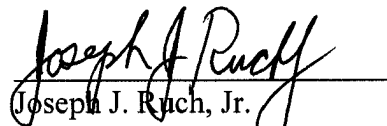
SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: October 14, 2008


Joseph J. Ruch, Jr.
Registration No. 26,577